PENNSYLVANIA EMERGENCY HEALTH SERVICES COUNCIL

Your Voice In EMS

RECOMMENDATION FOR CONSIDERATION

Board Meeting Date: March 26, 2014

Subject: Addition of n-Acetylcysteine to ALS Drug List

VTR#: 0314-01 Committee/Task Force: Medical Advisory

☒Recommended Goal ☐Recommended Policy Change ☐Other:

Recommendation:

The Department of Health should add n-Acetylcysteine (Mucomyst™) to the List of Approved Medications for ALS Ambulances for interfacility transports.

Rationale [Background]:

A request was received by the Bureau of EMS from the Dr. Michael Lynch, Medical Director, Pittsburgh Poison Control Center to permit ALS providers to monitor continuous n-Acetylcysteine infusions during interfacility transport. N-Acetylcysteine is administered to patients undergoing treatment for Acetaminophen overdose and according to Dr. Lynch the drug is very safe and significant side effects are infrequent and rarely serious.

Dr. Lynch does however note that if the infusion must be discontinued to facilitate EMS transport harm to the patient may be significant. Delays in administration are associated with increased toxicity, including the need for liver transplantation or even death. Because these patients are most often in stable condition, use of an air medical or ground critical care transport team is would not be an appropriate allocation of resources. Typically, n-Acetylcysteine therapy would be initiated by the referring facility with a loading dose and only monitoring of continuous IV infusion would be required during transport.

(Dr. Lynch's letter is attached to this recommendation for reference.)

Medical Review [Concerns]:

The MAC reviewed this request at its January 8, 2014 meeting and voted unanimously to recommend its adoption by the Department of Health.

Fiscal Concerns:

None

Educational Concerns:

The Agency Medical Director is responsible to educate ALS providers on the administration of n-Acetylcysteine .

Plan of Implementation:

Upon adoption of this recommendation, the Department of Health should:

1. Publish an update to the List of Approved Medications for ALS Ambulances in the Pennsylvania Bulletin.

The PEHSC Committee/Task Force offers consultation to the Department in regard to the content of this Vote to Recommend (VTR) and its attached documents. The PEHSC Committee/Task Force specifically offers staff or member support to participate in Department deliberations regarding this recommendation in an effort to convey committee/task force discussions.

Board Meeting Comments/Concerns:
A member suggested the Department consider producing an educational program, for use by agency medical directors, on the administration of this medication.

Signed: David Jones
President

Date 3/27/14

For PEHSC Use Only – PA Department of Health Response

Accept:____ Table:____ Modify:____ Reject:____

Comments:

Date of Department Response:_____

Pittsburgh Poison Center

3507 Victoria Street, Pittsburgh, Pa. 15213

412-605-3131

December 20, 2013

Bob Cooney

Bureau of EMS Room 10-32

Health & Welfare Bldg

7th and Forster Streets

Harrisburg PA 17120

Dear Mr. Cooney:

I am requesting that intravenous n-acetylcysteine administration be approved for use in interhospital transportation. N-acetylcysteine administration is very safe and is administered in non-monitored units of hospitals. Significant side effects are infrequent and rarely serious. However, the harm of prolonged discontinuation of n-acetylcysteine administration is significant. The primary indication for use is acetaminophen toxicity in order to prevent life threatening liver injury. It is very effective if given early after exposure. Delays in administration are associated with increased toxicity, including potentially death or need for liver transplantation. We often run into the dilemma of transporting these patients from one facility to ours, where specialized providers in Toxicology, Liver Transplant Critical Care, and Transplant surgeons are available, but having to discontinue antidote therapy, potentially for a prolonged period of time, in order to transfer the patient to the appropriate facility. This discontinuation in therapy can be associated with worsened outcomes. The alternative is to employ a critical care or air transport provider. However, many of these patients do not otherwise require this level of care and the associated cost and risk. Typically, n-acetylcysteine therapy would have been initiated in the original facility with a loading dose. I would anticipate that only maintenance infusion would be required during transport. The vast majority of infrequent adverse effects are associated with the loading dose so the risk of

administration during transport would be extremely low. I would also anticipate that the medication would be provided by the transferring facility. I am happy to assist in writing the necessary protocols should this be approved.

Thank you very much for your time and consideration of my request. Please contact me with any questions.

Sincerely,

Michael Lynch, MD

Medical Director, Pittsburgh Poison Center

Assistant Professor

Division of Medical Toxicology, Department of Emergency Medicine

Divisions of Adolescent and Pediatric Emergency Medicine, Department of Pediatrics

University of Pittsburgh School of Medicine

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